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10/551,029	09/29/2005	Declan Patrick Kelly	FR 030036	8239
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BRIARCLIFF	LIFF MANOR, NY 10510		ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Summary	10/551,029	KELLY ET AL.				
omee Action Gammary	Examiner	Art Unit				
The MAILING DATE of this communication	LaTanya Bibbins	2627				
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with	n the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication  - If NO period for reply is specified above, the maximum statutory pe  - Failure to reply within the set or extended period for reply will, by s Any reply received by the Office later than three months after the n earned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNIC R 1.136(a). In no event, however, may a re h. eriod will apply and will expire SIX (6) MONT tatute, cause the application to become ABA	ATION. ply be timely filed  HS from the mailing date of this communication. NDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 2	Responsive to communication(s) filed on 29 September 2005.					
· <u>—</u>	,—					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) 1-11 is/are pending in the applica 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-11 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction are	drawn from consideration.					
Application Papers		•				
9) The specification is objected to by the Exam 10) The drawing(s) filed on 29 September 2005  Applicant may not request that any objection to Replacement drawing sheet(s) including the constant of the second of	is/are: a)⊠ accepted or b)☐ the drawing(s) be held in abeyand rrection is required if the drawing(s	e. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:  1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the priority docum application from the International Bu * See the attached detailed Office action for a	nents have been received. nents have been received in Ap priority documents have been r reau (PCT Rule 17.2(a)).	plication No eceived in this National Stage				
Attachment(s)	_					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>		mmary (PTO-413) /Mail Date				
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	5)  Notice of Inf 6)  Other:	ormal Patent Application -·				

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#### **DETAILED ACTION**

#### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### **Preliminary Amendment**

2. Receipt is acknowledged of the preliminary amendment filed on September 29, 2005. In the amendment claims 3, 4, 7, and 10 were amended. Currently claims 1-11 are pending.

#### Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. <u>Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.</u>

Claim 11 recites the limitations "the files" and "the more frequently used files."

There is insufficient antecedent basis for these limitations in the claim.

### Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. <u>Claims 1, 3, and 4 are rejected under 35 U.S.C. 102(e) as being anticipated</u>
by Mäkelä et al. (US Patent Number 7,072,637 B2).

Regarding claim 1, Mäkelä discloses a data carrier for storing files (the diskbased memory described in column 2 lines 15-16 and column 3 line 27), comprising files, the transfer rate of which is dependent of their locations on the data carrier, the files often required by the user being in locations that provide a high file transfer rate (column 2 lines 13-28, column 4 lines 4-14, 50, and 51, column 6 lines 17-19, column 7 lines 46 – column 8 line 1, and column 8 line 51-53).

Regarding claim 3, Mäkelä discloses a data carrier as claimed in claim 1, which is a rewritable carrier (see the discussion in column 7 lines 29-34 where location of files are changed thus the data carrier is rewritable).

Regarding claim 4, Mäkelä discloses a data carrier as claimed in claim 1, comprising a frequency file for containing an indication of the use of files contained in it (column 5 lines 59-64 and column 6 lines 28-34).

## Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

# 8. <u>Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable</u> over Mäkelä et al. (US Patent Number 7,072,637 B2).

Regarding claim 2, Mäkelä discloses a data carrier as claimed in claim 1 and noted in the 35 U.S.C. 102(e) rejection above, having a disc shape (see the disk-based memory device shown in Figures 5A, 5B, and 5C). While Mäkelä does not specifically indicate that disk-based memory device is an optical data carrier, Examiner takes official notice that it would have been obvious to one of ordinary skill in the art a the time the invention was made to have the data carrier as an optical data carrier. One of ordinary skill in the art at the time the invention was made would have been motivated to utilize an optical data carrier as the disc shaped data carrier since the use of optical media to store data was well known and widely used at the time of the invention.

Regarding claim 5, Mäkelä discloses a data carrier as claimed in claim 4 and noted in the 35 U.S.C. 102(e) rejection above, but does not specifically disclose that the frequency file is an UDF file type.

However, Examiner takes official notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the frequency file as a UDF file type. One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the UDF file type in order to insure compatibility with most operating systems and computer based workstations.

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9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Mäkelä et al. (US Patent Number 7,072,637 B2) in view of van der Aa et al. (Small

Form Factor Optical Drive: Miniaturized Plastic High-NA Objective and Optical

Drive which appears in Optical Memory and Optical Data Storage Topical Meeting,

2002 pages 251-253, International Symposium on 2002) herein referred to as van

der Aa.

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Regarding claim 6, Mäkelä discloses a data carrier as claimed in claim 5, but does not disclose that the data carrier is of the SFFO type. Van der Aa, however discloses a data carrier of the SFFO type (see the abstract and the discussion of third generation optical storage technology on page 251).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of van der Aa with Mäkelä. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings in order to provide a data carrier with a user capacity of 1 Gbyte on a 30 mm rewritable optical disc (see the abstract of van der Aa).

10. Claims 7-10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mäkelä et al. (US Patent Number 7,072,637 B2) as applied to claim 1 above, and further in view of Hamaguchi et al. (US Patent Number 6,906,889 B2).

Regarding claim 7, Mäkelä discloses an apparatus suitable for managing a data carrier as claimed in claim 1 as noted in the 35 U.S.C. 102(b) rejection above.

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Mäkelä further discloses frequency means for determining the frequency of use of files contained in the data carrier (column 5 lines 59-64 and column 6 lines 28-34) and allocating means for placing the more frequently used files in locations providing a faster transfer (column 2 lines 13-28, column 4 lines 4-14, 50, and 51, column 6 lines 17-19, column 7 lines 46 – column 8 line 1, and column 8 line 51-53). In addition, while not specifically disclosed, Mäkelä suggests both a driving means for driving said data carrier and means for reading and writing the data stored in it (see column 1 lines 17-20 and the discussion regarding rotating the memory disk and actuating the disk heads which is inherent to all optical disk devices). Mäkelä, however, fails to suggest or disclose means for stopping at least said driving means when the transfer has been completed.

Hamaguchi, on the other hand, specifically discloses driving means for driving said data carrier (see the discussion of the spindle motor in Column 1 lines 9-1 and 58-67), means for reading the data stored in it (see the discussion of the head used for reading and writing in column 1 lines 17-29), means for writing data in it (see the discussion of the head used for reading and writing in column 1 lines 17-29), and means for stopping at least said driving means when the transfer has been completed (column 1 lines 9-11 and 58-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Hamaguchi into that of Mäkelä. One of ordinary skill in the art at the time the invention was made would have

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been motivated to combine the teachings in order to lower the power consumption as indicated by Hamaguchi (column 1 lines 9-11).

Regarding claim 8, Mäkelä in combination with Hamaguci disclose an apparatus as claimed in claim 7. Mäkelä further discloses wherein the frequency means are constituted by a table indicating the name of each file in relation to the number of times said file is used (column 5 lines 59-64 and column 6 lines 40-44).

Regarding claim 9, Mäkelä in combination with Hamaguci disclose an apparatus as claimed in claim 8. Mäkelä further discloses wherein the frequency means are constituted by a component which is placed on the data carrier (column 5 lines 59-64 and column 6 lines 40-44).

Regarding claim 10, Mäkelä in combination with Hamaguci disclose an apparatus as claimed in claim 7. Mäkelä further discloses a battery for supplying said apparatus (column 1 lines 34-45), charging means for charging said battery (column 3 lines 1-3), said allocating means being put into operation during the charging (column 8 lines 1-3 and column 7 lines 35-37).

Regarding claim 11, Mäkelä discloses a method of economizing the supply energy of an apparatus managing a data carrier having power-consuming elements which consume supply energy during a transfer of data from the data carrier, which method comprises the steps of: determining the files more frequently used (column 5 lines 59-64 and column 6 lines 28-34), allocating the more frequently used files to locations on the carrier which are faster in transferring (column 4 lines 4-14, 50, and 51, column 6 lines 17-19, column 7 lines 46 – column 8 line 1), supplying said power-

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consuming elements when the transfer has been completed (column 1 lines 26 and 27 and column 7 lines 35-42).

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#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571) 270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WAYNE YOUNG

La anya Bibbins